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RESEARCH

Sistematização da assistência de enfermagem na prevenção de infecções em unidade de terapia intensiva

Systematization of nursing in preventing infections in intensive care unit

Sistematización de la enfermería en la prevención de infecciones en la unidad de cuidados intensivos

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ABSTRACT

Objective: This research aimed to identify possible interfaces between the systematization of nursing care and prevention of infections in intensive care unit. **Method:** it was performed by direct observation of reality, in an intensive care unit, in the state of rio grande do norte. in the context studied, sometimes the snc was performed disregarding the specifics of each patient, when it comes to preventing infections. **Results:** while conducting the physical examination and care plan, some principles of asepsis were not respected. The snc in the icu is incipient and their studied steps serve more to institutional routines than the needs of care of patients. **Conclusion:** it is possible to articulate snc prevention and control of infections, adding this to nursing care. **Descriptors:** Nursing, Nosocomial infection, Intensive care units.

RESUMO

Objetivo: Esta pesquisa objetivou identificar possíveis interfaces entre a sistematização da assistência de enfermagem e a prevenção de infecções em uti. **Método**: foi realizada por meio de observação direta da realidade, em uma unidade de terapia intensiva, no estado do rio grande do norte. no contexto estudado, por vezes, a sae foi realizada, desconsiderando as especificidades de cada paciente, em se tratando da prevenção de infecções. Durante a admissão no setor e na elaboração do histórico do paciente, os fatores de risco individuais para a ocorrência de infecções não foram pesquisados. **Resultados:** durante a realização do exame físico e do plano de cuidados, alguns princípios de assepsia não foram respeitados. a sae na uti estudada é incipiente e suas etapas atendem mais às rotinas institucionais do que às necessidades de cuidado dos pacientes. **Conclusão:** é possível articular a sae à prevenção e controle de infecções, agregando-a ao cuidado de enfermagem. **Descritores:** Enfermagem, Infecção hospitalar, Unidades de terapia intensiva.

RESUMEN

Objetivo: Esta investigación tuvo como objetivo identificar las interfaces posibles entre la sistematización de la asistencia de enfermería y la prevención de las infecciones en unidades de cuidados intensivos. **Método:** se realizó mediante la observación directa de la realidad, en una unidad de cuidados intensivos, estado de rio grande del norte. en el contexto estudiado, a veces la sae se realizó sin tener en cuenta las particularidades de cada paciente, cuando se trata de la prevención de infecciones. **Resultados**: durante el ingreso en el sector, y el desarrollo de la historia clínica del paciente, los factores individuales de riesgo para la ocurrencia de infecciones no fueron investigados. Durante el examen físico y un plan de cuidado, algunos de los principios de asepsia no fueron respetados. la sae en el uti estudiada es la etapa incipiente y ya no cumplen con sus rutinas institucionales que las necesidades de atención del paciente. **Conclusión:** es posible articular sae a la prevención y control de infecciones, sumando esto a la atención de enfermería. **Descriptores:** Enfermería, Infección hospitalaria, Unidades de terapia intensiva.

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INTRODUCTION

The infections in Health Care-related (IrAS) are all infections acquired through attention to health, whether through outpatient procedures or during hospitalization. Until the year of 2008, the concept adopted by the Ministry of health (MS) was the hospital infections (IH) and, from it, the focus was given to infection, which occurred in the hospital space.[1]

According to this new concept, the infection is not restricted essentially to hospital assistance, since it can happen at all levels of attention, either in basic health unit at the hospital, at home and in home care services. [2]

These infections contribute to the worsening of the patient's clinical picture, imply more health care spending, due to the increase of patient's stay in hospital or treatment of diseases, and lead to non-measurable costs such as: remoteness of family and work life. They represent a concern not only of the health sector, but also becomes a problem of legal, ethical and social order, because it results in complications in the lives of users of health services. [3]

Among the sectors most at risk for the occurrence of IrAS is the intensive care unit (ICU), because it is a place where patients are in a critical condition, who constantly undergo invasive procedures, which makes them more prone to contracting this type of infection.

The ICU is a place that provides specialized assistance to clients in serious situations and requires permanent assistance. This environment presents a complex dynamics, in which there is concentration of human and technological resources needed for the continuous monitoring of the customers, but also for intervention in emergency situations. [4]

In Europe, in the year 1992, 1,417 intensive care units distributed in 17 countries, presented a report of at least one infection in about 21% of hospitalized patients; assuming as causes pneumonia, which corresponded to 47%; other lower respiratory tract infections and urinary tract infections was 18% each one; and infections of the bloodstream, representing 12% of reported cases. [5]

In the ICU, the profile of inpatients favors the occurrence of infections due to its intrinsic factors (immune depression, nutritional deficiency and emotional state of the user) and extrinsic (the hospital environment potentially contaminated, invasive procedures, among others). This condition inherent in the sector requires that assistance be carried out in strict compliance with the principles of prevention and control of IrAS, established in Brazil by Ordinance 2,616/98.[1]

This Ordinance sets the infection control as a set of measures, which are rules for the organization of actions and health services, in line with the principles and guidelines of the prevention and control of infections.

It establishes the conditions for the development of measures to rationalize the assistance, minimizing their potential iatrogenic, which is able to promote the spread of

germs in environments where the health care is developed. This control is developed in each service, by the Control of infections Commission (CCIH); collegial body responsible for the implementation and monitoring of these measures. [1]

Considering the specifics of the ICU and the patients who need this sector, it is important to highlight that nursing is responsible for the majority of interventions carried out by the patient; this category is therefore a relevant role in the prevention and control of IrAS, since she is responsible for carrying out the greatest assistance interventions and procedures.[6]

Other aspects that refer to nursing care is the fact that its assistive process must be aware of the limitations of patients, knowing that the hospitalization in ICU affects their independence, as there's loss of autonomy, the ability for self-care and for decision-making.[4]

The way nursing staff systematizes its assistance may favor or not the control of infections in the ICU, provided that it is in line with the guidelines of CCIH and the technical and scientific principles, which supports the nursing care in intensive care.

Systematization of nursing care (SAE) is a legal prerogative for the job of nurses. Its execution enables since the identification of the needs of the patient, to the preparation of a care plan geared toward its needs and health issues. It consists of five steps: history, diagnosis, planning, implementation and evaluation of nursing. Didactically and conceptually, these steps appear separate, but in its execution, must be closely related. [7]

In many contexts of health services, the SAE implementation is still incipient, ineffective and poorly supported theory. The SAE is often developed routinely and distant from the real needs of the patient, which lies under the care of nursing. [8]

Considering the high costs of hospitalization in intensive care, it is paradoxical considering that assistance, while that for the treatment and cure of diseases, it is also a way for patients to acquire infections related to the assistance provided.

This research has as objective to describe some interfaces between the steps of the SAE and the principles of prevention and control of infections in the ICU. It also proposes identifying perform a description of observance of these principles in the daily life of an ICU outreach, from the moment of admission of the patient to the implementation of a plan of care and the performance of invasive procedures.

It was held in an ICU of a Regional Referral Hospital of Rio Grande do Norte; the data were collected through direct observation of reality.

The relevance of the study lies in the description of interfaces between steps of the SAE and the prevention and control of IrAS in the ICU. It identifies moments when the SAE is developed, or not, in line with measures to ensure the reduction of risks for the occurrence of infection in the ICU environment.

METHOD

It is a descriptive, qualitative research; was held in an ICU of a Regional Referral Hospital in the State of Rio Grande do Norte.

The subjects of the research were professionals in the nursing staff of the cited sector. As criteria for inclusion was used: to be professional nursing and be scaled to develop its activities in the ICU. Exclusion criteria: to be institutionally estranged from their activities, or the refusal to sign a term of free and clear consent (TFCC).

The data collection took place during the period from October 2011 to February 2012, in morning and afternoon shifts. The direct observation of reality was recorded in a field journal. This observation was geared to the times when the nursing staff held their assistance activities, since the organization of their working tools, until the action planning, its completion and due record in patient records.

The data generated were organized into topics, called from the steps of SAE, advocated by the Federal Council of Nursing Care (COFEN). [7] In each of them, were grouped assistance records, whose nature is conceptually inserted in these steps. So, for example, on the topic of Nursing History, were grouped the data produced from observation of moments, in which, on admission of patients, assistance was geared towards the elaboration of a history of current and previous medical conditions, socio-economic and cultural conditions, among others.

The researchers adopted as theoretical framework to support the discussion of SAE, resolution No. 358 of the COFEN, October 15, 2009;[7] and the guidelines for the prevention and control of infection, was adopted the Ordinance of the National Agency of Sanitary Surveillance (ANVISA), no. 2,616 of May 12 1998.1 This Resolution provides for the Systematization of Nursing Care and the implementation of the Nursing Process in environments, public or private, in which occurs the professional nursing care, and other matters.

The research was approved by the Research Ethics Committee of the University Brazil, with the Protocol of April 15, 2011 2011/222, and Ethical Assessment presentation certificate No. 0227005200010.

RESULTS E DISCUSSION

CHARACTERIZING THE LOCATION OF THE STUDY:

The search field is characterized as an ICU adult, General, composed of 10 beds. It is embedded in a regional referral hospital serving a population around 500,000 inhabitants.

In each work shift, there is a scale with at least one nurse and 3 to 4 nursing technicians. Daily, in the morning shift, it has the presence of a nurse diarist, with the responsibility of acting in administrative and organizational dimension of the sector; allowing more time for the others professionals nurses have more time for assistance, actions directly with patients.

The patient may be admitted to the ICU, from Emergency Room, Medical Clinic or Surgery. Patients admitted to the Emergency Room, are usually young victims of traffic accidents; patients admitted to the Medical Clinic, in general, are elderly with respiratory

and heart problems; and patients from the Surgical Center, generally are young people who have undergone craniotomy, as a result of traffic accidents, or victims of perforations per firearm or cold weapon.

CCIH coordination of the cited service drafted a manual of recommendations for prevention and control of infections related to healthcare. This guide reinforces the need for involvement of the entire hospital community in the prevention and control of infection.

DATA COLLECTION (NURSING HISTORY):

Although there is no reference to the nursing process, assistance is organized in four stages. The first of these is the admission of the patient in the ICU, where is held a collection of data about your current and prior medical conditions, and their socio-economic conditions. At this point, is still a physical exam, by inspection, palpation, percussion and auscultate. It is considered therefore that the care of the seriously ill patient demand systematic and planned assistance, regarding construction of technical, physiopathology and laboratory knowledge, it is interesting to emphasize the importance of nursing in this context and concerning the nursing assistance. [7]

Data collection is considered the first step to characterize the state of health of the patient, in order to identify their needs, eating habits, progression of pathologies, housing conditions, work and leisure, among others.[7]

This step is critical, so that assistance is ensured, which takes into account the needs of the patient, having as reference the reason that led him to be hospitalized in ICU and other necessities and health problems, which can be detected during the period.[11] One of the requirements, is the prevention of infections from the identification of individual risk factors of each patient.

The greater the number of affected client needs, the greater the accuracy of planning assistance, once the systematization of the actions aimed at the organization, efficiency and validity of assistance.[10]

In the ICU, to the time of data collection, still is used a specific form of the sector to achieve the physical examination; it is structured in the form of a checklist. From it, the vital functions are evaluated (neurological state, hemodynamic status, respiratory function) and deletions. Are still recorded information about the offer of diet (diet type, if the offer is for nasogastric or nasoenteric); information on the mode of supply of oxygentherapy (whether by mechanical ventilation by mask or by nasal catheter); about the bath in the bed (with or without help from the patient). It includes also the record of the presence of pressure ulcers and wounds of any etiology.

It is noticed that a document like this is of great importance for the achievement of nursing history and the physical examination. However, patients who find themselves in an ICU, sometimes, are unstable and need to be in continuous observation. The adoption of an instrument of data collection should not be limited to the evaluation of the patient by the team.[10]

Even if it has a well-structured form for data collection, this stage of systematization always will require adaptations, to better serve the purpose of subsidizing the SAE, the prevention and control of IrAS.

NURSING DIAGNOSIS:

This moment of SAE consists in the interpretation of the data collected, thoroughly and carefully; based on actual or potential health problems, which may be of physiological, behavioral, spiritual dysfunction; and, from these problems or needs, trace the most effective interventions for achieving the proposed objectives for the nursing assistance.[10.11]

Searched in the ICU, not been identified the development of the nursing diagnoses, because none of the records in the charts refers to diagnosis of the patient's clinical condition, generating thus a gap in nursing work, both with regard to necessary care to the critical patient, regarding the prevention of IrAS.

The absence of a systematic development of these Diagnostics can encourage a disconnected assistance of patient needs;[12] in addition to neglecting the risks for the occurrence of infections.

NURSING PLANNING:

Nursing planning results from the evaluation of the patient, in which problems are identified or health needs, by which nursing is responsible. It allows the individualization of care in addition to guide the decision-making process of nursing.[13] In the planning, it will be determined the interventions to be carried out and the results expected from the nursing Diagnoses.[10.11]

Considering the principles of prevention and control of infections in the specificity of the ICU, the Planning of Nursing has broad potential to subsidize these actions, since it has as basis the Nursing Diagnoses and the risk for the occurrence of infection.

It was identified that the assistance of nursing actions in that ICU met more the sector standards and routines than to the problems and needs of the patient. The sector daily searched is governed by general interventions (hygiene, aspiration of secretions, realization of bandages and medicines administration), to the detriment of an individualized care plan, focused on the problems and needs of the patient.

Thus, the prevention of IrAS in the searched assumes a generic character, without heed for the specifics of each patient; the etiology of the diseases and their implications, neurological and metabolic, hemodynamic, among others, sometimes are not considered as a source for nursing diagnoses, besides not being used to subsidize the service developed.

This way to organize and develop the nursing care also contradicts the principles of nursing care to critical patient in the intensive care unit, whose needs and health issues are inevitably affected, requiring a careful evaluation that is capable of guiding an individualized and effective assistance.[12]

However realizes that, given the lack of Nursing Diagnoses, planning also has gaps, because there is a prior identification of needs and the patient's health problems, which can guide the assistance. [11]

NURSING INTERVENTIONS:

The next step of SAE is the elaboration of a plan of nursing care, on the needs identified[11]. In the daily researched this plan contemplates procedures inherent to

hospitalization in ICU, such as: gauging of vital signs, water control, continuous monitoring, general hygiene care.

Systematic interventions were not observed, though they were aimed at the prevention and control of IrAS. Nursing interventions turned mainly to the completion of the assistance that, disregarding routines in each patient, there are needs and problems, that reflect the specificity of the assistance that each one needs.

IMPLEMENTATION

The implementation is the stage at which nursing interventions are performed, from the nursing Diagnoses and nursing planning.[10.11]

In the ICU, this happens through implementation of a care plan, which boil down to routine interventions in an ICU, such as: the bath in the bed, administration of medications, the maintenance of venous access, the administration of the diet, and the necessary assistance to specialized procedures, which routinely happen (tracheostomy, the cardiopulmonary resuscitation, among others).

There is an attempt to elaborate the requirements of nursing, however, they take a routine assistance feature; in most cases, have to care for hygiene and record vital signs, when they should be related to the needs of the patient.

Without a systematic assistance, the risks of infection are even more present. Every moment in the ICU, several actions are performed, they should be planned, guided by the singularly individual needs and the susceptibility of each patient.[10, 14]

NURSING ASSESSMENT:

Nursing assessment is a systematic and continuous process, in which they will be assessed the changes in the clinical picture of the patient, as a result of the nursing Interventions; its implementation must not be confined only to the time after the completion of the previous steps, because it is understood that these are not watertight moments, and therefore the evaluation be performed throughout the process. [10.11]

It signs of achievement of this phase has not been identified during the period of the survey; the ICU has a routine of its own, to which assistance patients were subjected. If it was not observed Nursing Assessment, it is understood that not always the procedures and routines, these patients were subjected, have attended to his needs, relegating even the principles of prevention and control of IrAS.

The prevention and control of infections are a set of systematic actions, carried out uninterruptedly throughout the assistance provided to the patient. Continuously, these actions are reviewed with the purpose of assessing its effectiveness.[15]

Similarly, the nursing care, as advocates the SAE, needs to be evaluated in the light of the results achieved; for some professionals who are in daily life, this moment not yet healthcare is regarded as relevant to the care process.

NURSING RECORDS:

This step of the SAE corresponds to the time they are held the record in the patient's chart. The records serve as a registry for the purpose of providing information regarding the

assistance provided to the user, in order to ensure communication between the members of the health team, ensuring the continuity of assistance.[11]

It was observed that, in the records of admissions, were only more general information about the patient, such as: the origin of equipment support vital functions (mechanical ventilator, infusion pump) brought together with the patient of other sectors; surgical procedures or of polls to which he had been subjected. Although very important this records do not include all the information related to the prevention and control of infections.[16]

It was observed that, when these records were achieved by the academics of nursing, there was a concern in document thoroughly patient conditions.

The subjects of the research often reported, indirectly, that this practice of registration was due to the reduced number of professionals and work excessive hours; situation that is experienced in other contexts, where the work consists of repetitive tasks and by the incorporation of work routines, to the detriment of a Systematization of the assistance.

The nursing Record consists of an important moment in which the professional practice becomes visible to the team of professionals involved in the assistance. The record contributes to the continuity of care evaluation, developed and proper ethical-legal purposes.[11]

CONCLUSION

The SAE within the ICU is still disjointed and incipient researched the actions of prevention and control of IrAS. The assistance is organized on the basis of administrative routines, to the detriment of the needs of the patient.

Although it is possible to identify, in a few moments, actions, which refer to the stages of Systematization of Nursing Care, they are not yet in systematization advocated by COFEN.

The prevention and control of IrAS in the ICU do not possess a systematization which articulates the daily life assistance; basic principles are disregarded during execution.

The prevention and control of IrAS in intensive care is a necessity inherent in the admission in that sector; this prevention need to be articulated with the assistance developed by professionals alone or as a team.

Although they are not identified in ICU searched a Systematization of Nursing Care, as advocated by the Council of professional nursing, it can infer that the articulation of the leaves with the prevention and control of infections in ICU in particular, it is possible and necessary.

The observance of the principles of prevention and control of IrAS is intrinsically nursing assistance, since the simpler measures such as washing hands before and after any healthcare procedure until the specialist care, inherent in the intensive care unit.

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